Trains Album of Photographs

BALTIMORE & OHIO RAILROAD

Number 13

Trains Album of Railroad Photographs

BALTIMORE & OHIO RAILROAD

Book 13

Kalmbach Publishing Co.
Milwaukee 3, Wisconsin

Copyright 1946 by Kalmbach Publishing Co.

The Baltimore & Ohio was America's first common carrier railroad, chartered in 1827 and opened for public business in 1830. It is still operating under the original Maryland charter, and not the least of its attributes is its history of continuous operation covering the entire development of the science of railroad transportation.

But the road also lives very much in the present as one of the leading trade routes between the great river valleys of our Central United States and the Eastern seaboard. As in the beginning the B&O is a great asset to the port of Baltimore, drawing to it the commerce of the Ohio Valley. But likewise it is a route from the West Virginia coal fields to the coastal cities, a route for manufactured goods in both directions between the great cities of the interior and Baltimore, Washington, Philadelphia and New York, and a passenger line of no mean proportions, particularly between Washington and Baltimore and Cincinnati, St. Louis, Pittsburgh, and Chicago.

It is the main line between east and west through Washington which offers one of the principal arguments for traveling on this road. But in addition is the scenery of its great mountain crossings over the Alleghenies. Two main lines go west from Cumberland into the mountains, one the route of the National Limited toward Cinicinnati and the other the route of the Capitol Limited toward Pittsburgh. The Cincinnati line climbs Seventeen Mile grade, whose 2.2 per cent gradient set the standard for many other mountain railroads in this country, and then rolls down Cranberry grade alongside hard laboring eastward coal drags. The Pittsburgh line turns through Cumberland Narrows, which splits Wills Mountain, and then goes into the heart of the range through the broad flats of Wills Creek. At Sand Patch it tunnels the summit, and then works down the steep banks of the Youghiogheny toward the Steel City.

Diesel power has been featured for a decade on Baltimore & Ohio passenger trains, and the road was one of the first to adopt the freight Diesel. Improvement of steam power has not been neglected and the President class Pacifics have been completely rebuilt while new Mountain type and articulated steam locomotives have been built for freight service in recent years. The B&O has a long tradition of locomotive engineering to follow and live up to, starting with the old Tom Thumb with its rifle barrel flues and belted draft fan. It was on Seventeen Mile and Cranberry grades that the ungainly Camels of Ross Winans earned greatest popularity and it was on the B&O that Thatcher Perkins brought the Ten-Wheeler to great state of perfection. In more recent years the Mount Clare Shops in Baltimore have turned out such experiments as water tube fireboxes and the unusual Lady (4-4-4) and Lord (4-6-4) Baltimore locomotives which were used on the original lightweight streamlined Royal Blue.

Still it is more than equipment and history and geography which have given this railroad such a distinct personality. It is the people who run it. For B&O is a friendly railroad, a trait drilled into the organization by its late great President Daniel Willard and maintained by his successor, Roy White. The friendliness exudes from brakeman, dining car waiter, and everyone else who meets the passenger. This, more than anything else, is responsible for the fact that B&O carries quite a passenger traffic even on the highly competitive New York-Washington run.

Photographs cannot mirror the spirit of Baltimore & Ohio, but they can show the physical properties of the road. We have selected the pictures in this album to give a comprehensive overall view of the railroad, and we have reproduced them by our special processes which have proved so popular in earlier albums of this series. The ring binding allows you to remove a page for framing without damaging the rest of the book, and the printing is on only one side of each sheet. We hope you like the book, and we invite you to write us if you have ideas for further albums or for improvements.

TRAINS ALBUM OF PHOTOGRAPHS

By the Editors of Trains Magazine

Book 1—Eastern Railroads.

Book 2—Far Western Railroads.

Book 3—Midwestern Railroads.

Book 4—Colorado Railroads.

Book 5—Southern Railroads.

Book 6—New England Railroads.

Book 7—Electric Railways.

Book 8—Pennsylvania Railroad.

Book 9—New York Central Railroad.

Book 10—Modern Steam Locomotives.

Book 11—Southern Pacific Lines.

Book 12—Santa Fe Railway.

Book 13—Baltimore & Ohio Railroad.

Book 14—Erie Railroad.

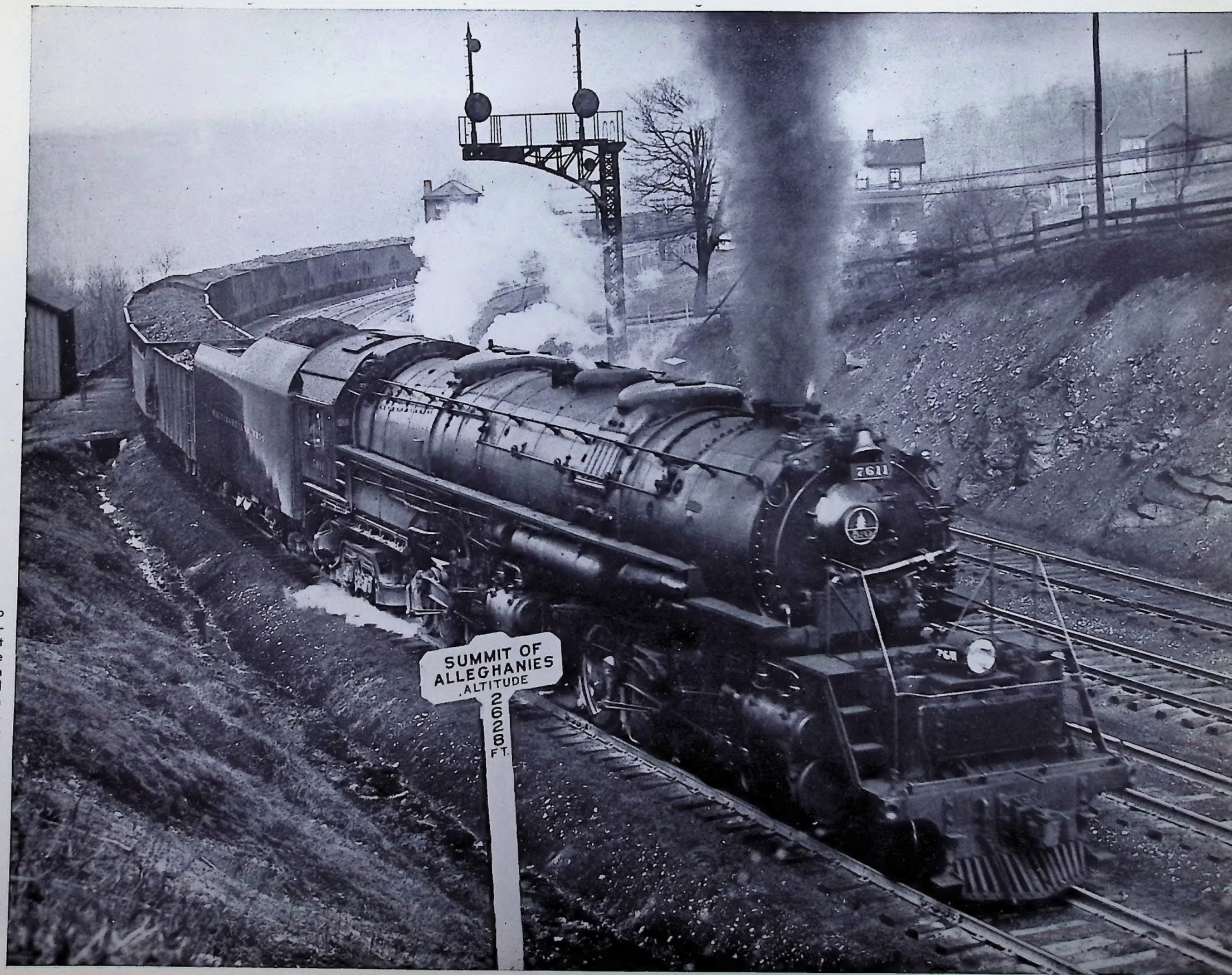
Book 15—Great Northern Railway.

$1 each

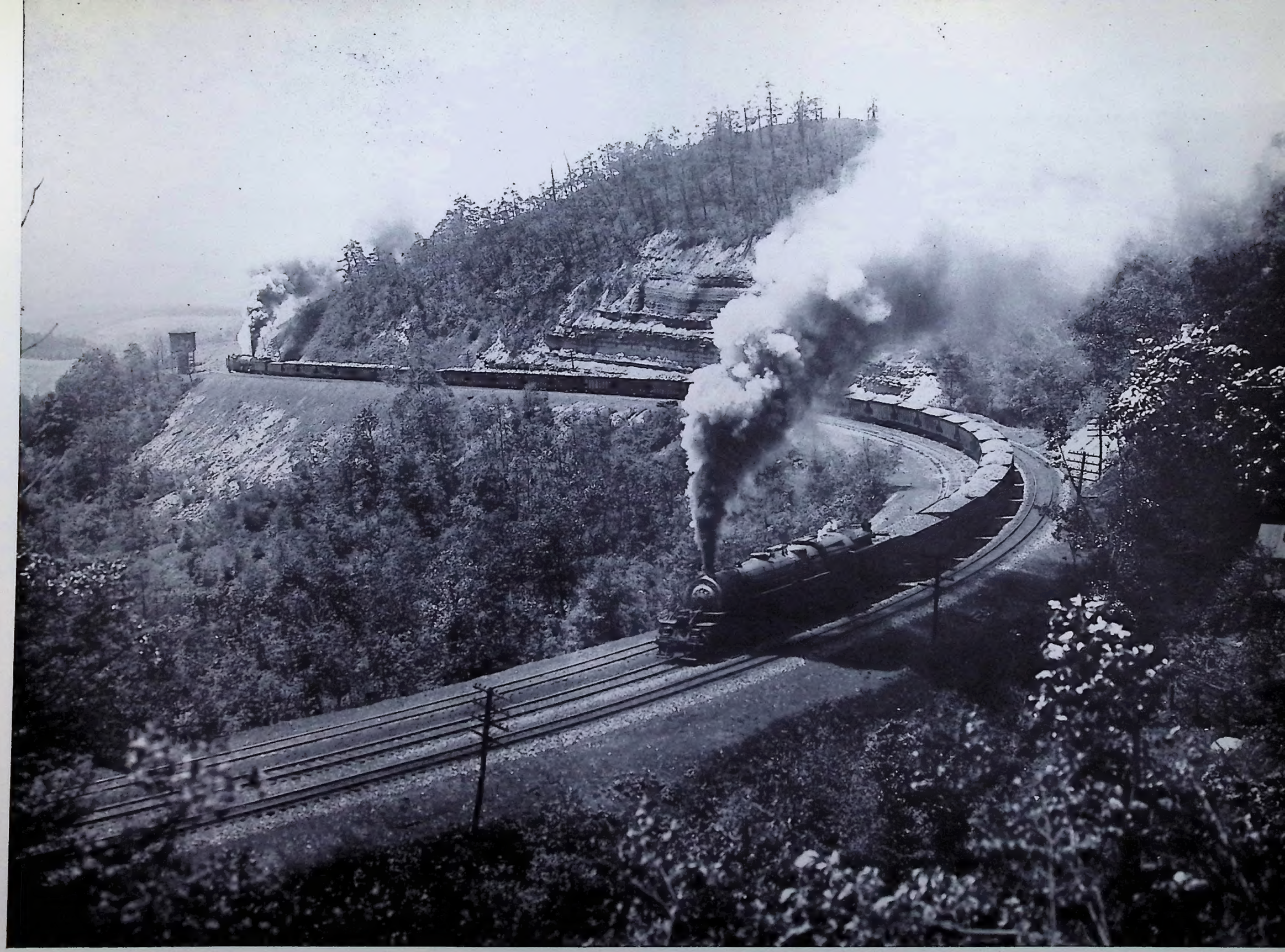
KALMBACH PUBLISHING CO.
Milwaukee 3, Wis.

Printed in U. S. A. by Kalmbach Publishing Co. Milwaukee 3, Wis.

Framed by the semaphores approaching the throat, the Royal Blue is shown leaving the Jersey City terminal on its run to Washington. The towers of lower Manhattan are in the background. Train connection buses which take passengers between Manhattan and this rail terminal use Jersey Central ferryboats for a cross-river ride which is a travel treat. By H. F. Harvey.



Baltimore & Ohio crosses the Alleghenies in two places, at Sand Patch on its line west to Pittsburgh and Chicago, and here, at Altamont, on its Cincinnati-St. Louis line. Much coal moves east over the Altamont summit from West Virginia fields and the noisy, spectacular action of two and three engine trains climbing eastbound Cranberry and Newburg grades never stops. From Altamont eastbound trains start down famous Seventeen Mile grade into the valley of the Potomac.



Salt Lick Curve lies just west of the summit of the Alleghenies on the West End of the Cumberland Division. This is the stretch of line known as Cranberry grade, the eastbound counterpart of Seventeen Mile grade. The loaded coal movement is uphill in this direction, and this coal drag with only one helper is having its troubles. Two Mallet pushers are generally used on eastbound coal trains.

On the grades by which the West End of the Cumberland Division crosses the Alleghenies B&O presents a constant panorama of splendid action. At left, by H. W. Pontin, is an eastward heavy coal train taking to the fourth track at Altamont Summit, W. Va. The helper on the rear is a Mike. Below is an eastbound upgrade coal extra at Terra Alta, W. Va., passing a downgrade train of coal empties. By H. W. Pontin.

This is R Tower at M&K Junction, W. Va., on the West End of the Cumberland Division. Numerous helpers are stationed here, and the division's busiest fueling station takes care of 150 engines daily, often more than 60 on one eight hour shift. M&K Junction is in a notch in the Alleghenies and the helpers operate out of here in both directions. By E. L. Thompson.

At historic Harpers Ferry the main line crosses the Potomac River on its own double-track bridge, while the picturesque Shenandoah Branch crosses on the highway bridge at left.

Beautiful river valleys feature B&O scenery. To the west of the Alleghenies, on the main line west to Pittsburgh and Chicago, the tracks follow a water level grade down the valley of the Youghiogheny, and the scene at Indian Creek, Pa., above, is in this valley. Below a freight train is moving eastward over the Magnolia Cutoff in the valley of the Potomac.

Twenty years ago the B&O purchased 20 heavy Pacifics of unusually fine lines and assigned them to its fast passenger trains between New York and Washington. They were painted resplendent green and gold and each was individually named after a president of the United States. As the locomotives lost their position as newest and finest passenger power of the road the names gave way to plain ordinary numbers and the President locomotives lost their distinctive color scheme. But they are still among the finest steam locomotives anywhere, and their lines have even been enhanced by recent rebuilding. They now look like the 5314, above.

A particularly neat and quite modern Ten-Wheeler is the 2024. In 1927, with the advent of the President Pacifics, she was painted experimentally with the same green and gold colors. With all her gay striping she was fit for the finest train on the road, and in fact often hauled President Daniel Willard in his business car on inspection trips.

Thirty of the EM-1 2-8-8-4 articulated locomotives, built by Baldwin, are in use on heavy freight, mostly over the Allegheny grades on the West End Subdivision. Numbered 7600-29, they weigh 628,700 pounds and exert 115,000 pounds tractive effort.

The Mallet compound locomotive, of which the modern simple articulated is a development, was introduced to America on the B&O. The J. E. Muhlfeld, below at the Fair of the Iron Horse, was the first. By W. G. Fancher, Railroad Photographic Club.

Developed on the B&O by Ross Winans, Baltimore locomotive builder, was the peculiar "camel" locomotive with its cab smack astride the boiler. In the days just before the Civil War 109 of these engines were at work, mostly on tough Seventeen Mile grade. The 80 was one of the earliest of this queer breed and is shown on the road in an original photo from L. E. Griffith's collection. The William Mason, maintained for fairs and fan trips and photographed in 1937 by Charles E. Pierce, was the first Mason-built American Standard purchased by the B&O. It was built in 1856.

Baltimore & Ohio purchased one of the very first E!ectro-Motive Diesels and it is shown above on the original Royal Blue between New York and Washington. By A. P. Formanek. Since then the road has gradually put more and more Diesels into both passenger and freight service until most principal through trains are Diesel powered. At left above is the Shenandoah near Akron, O. By Glenn Grabill Jr. Below is Diesel No. 51 on the first trip of the streamlined Capitol Limited out of Washington. By Railroad Photographic Club.

Under the city of Baltimore the B&O tunneled its Belt Line by which it joined its original main line west and its extension to Philadelphia. Opened in 1893 to replace a tedious ferryboat transfer across Baltimore harbor, the line was the first steam railroad use of electrification. The old woodcut above shows one of the original electric locomotives, with overhead third rail, pulling a steam train through the tunnel, locomotive and all. Modern locomotives, at right, use third rail at trackside, but still pull upgrade trains, locomotive and all, fires banked. Downgrade trains simply coast, without bothering to couple on the electrics.

To the west of Cumberland, Md., on the line to Pittsburgh and Chicago, the B&O follows Wills Creek through a natural pass in the Wills Mountains. On the left bank is the Western Maryland. The entire climb from Cumberland through the gap and on to the crest of the Alleghenies at Sand Patch is a spectacular piece of mountain railroading and it is well worth planning a trip so as to cover this stretch in daytime.

Two of the well proportioned P-4 Pacifics stand in Columbus Union Station ready to leave for Washington with a Shriners' special train. By Glenn Grabill Jr.

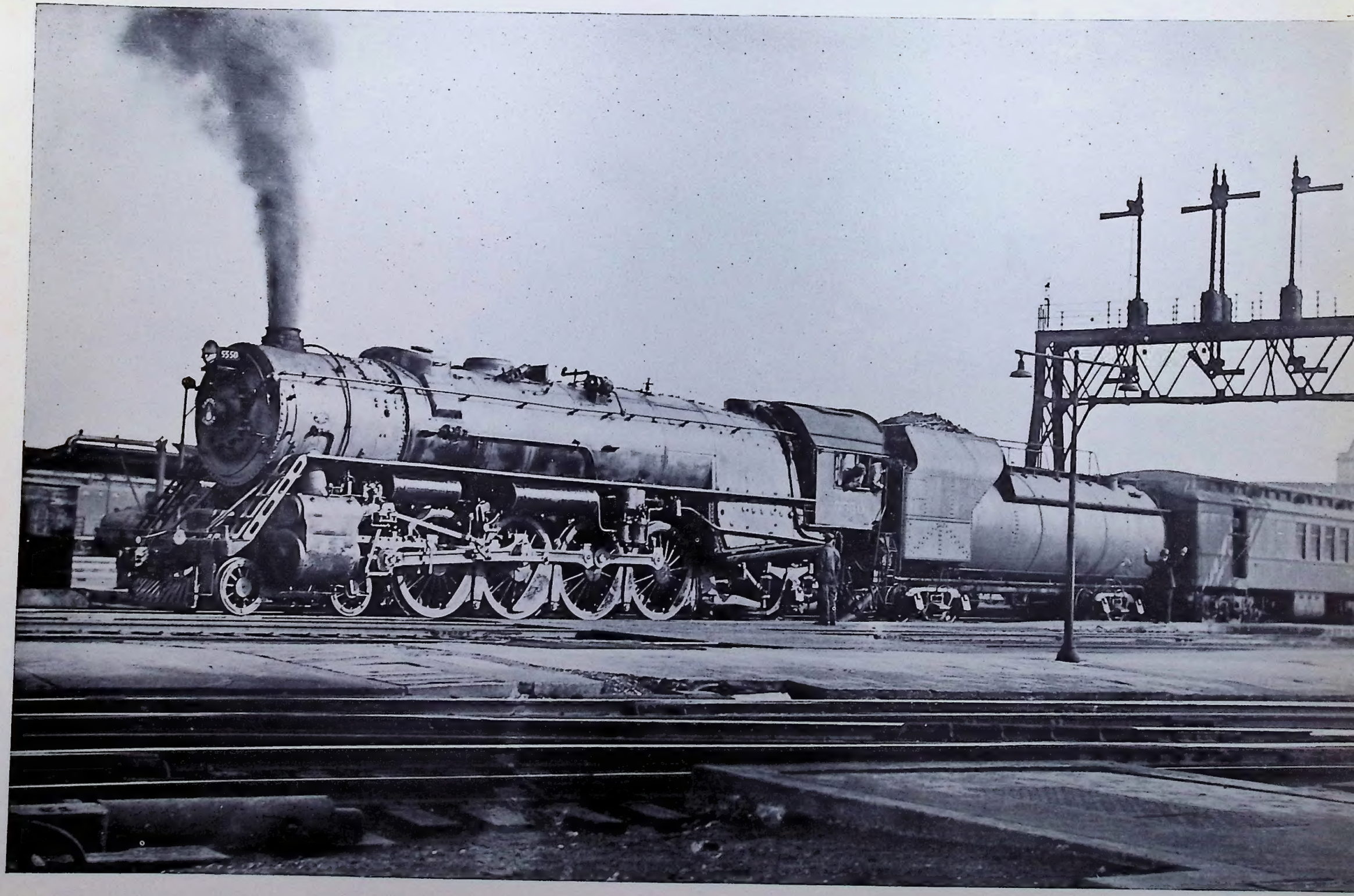
For B&O Washington Union Station is a stub terminal, reached from a wye about a mile northeast where the Metropolitan Branch (line to the west) and the Washington-Baltimore Branch join. This is a train from the west entering the wye preparatory to backing into the station. After the stop it will run directly from the station to Baltimore and beyond.

One of the oldest railway viaducts in use in the world is the stone arch structure at Relay, Md., on the line from Baltimore to Washington. It was built in 1834 to carry six-ton locomotives and is still in fine shape today and carrying the load of modern 300-ton locomotives and heavy steel rolling stock. The train in this photo is the National Limited of pre-streamlining days behind a President class Pacific locomotive.

A railroad over mountains is hardly a highway in the sense that we usually think of highways. It is rather an extremely efficient piece of high capacity, thoroughly organized mass production machinery for moving large tonnages of goods up and across and down the mountains. Never in level country can one get the feeling of heavy, hard work that is displayed so arrogantly by the locomotives, the cars, and even the trackage on mountain divisions of heavy tonnage lines. These scenes are on the B&O's crossing of the Alleghenies west of Cumberland. The locomotive above is about to stall with a heavy coal train up Cranberry grade. The two pushers above right (by E. L. Thompson) are helping a train up Seventeen Mile grade. The sharp upgrade single track is a safety spur, to catch runaway downgrade trains. The pushers at right below are also on Seventeen Mile grade.

Swinging around one of the many curves by which the Cumberland-Cincinnati line scales the Alleghenies, 2-8-8-4 No. 7614 digs in for Cranberry grade with a heavy coal train. By Ben Cutler, Railroad Photographic Club.

One of the most popular trains on Baltimore & Ohio is the slow comfortable overnight express between Washington and New York. To allow for a full night's sleep the journey is made in longer running time than that of the day trains and fewer stops. Here is the Night Express coming into the Jersey Central terminal at Jersey City. By H. F. Harvey.



Back in the days before Diesel passenger power one of the B&O's few Mountain type locomotives might often be seen on the front end of the Capitol Limited. This is class T-2 No. 5550 about to leave the Washington Terminal. By H. W. Pontin, Railroad Photographic Club.

At Justis, O., on the line between Wheeling and Cleveland, Glenn Grabill Jr., took this picture of a simple articulated 2-8-8-0 in fast action with a freight train.